From: Hoch, Kevin [Kevin.Hoch@aptim.com] Sent: Wednesday, June 24, 2020 8:44 AM

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Good morning-

Attached are the materials for the QCQ call.

Regards,

Kevin

Kevin Hoch

Quality Control Manager

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Project QC Meeting #011 Agenda (06/24/2020)

Parcel E Remedial Action – Phase 3 Hunters Point Naval Shipyard, San Francisco, CA Contract N62473-17-D-0006 CTO 4761

Call-in number: (b) (4)

Start: 1120 End:

Safety Topic: Hearing protection

Old Business

Submittals

- Submittal 001 Rebar for Seawall
 - Submitted to Navy for informational purposes only on 2/17/20
- Submittal 002 Shoring Design
 - o Approved by Navy on 03/24/20
- Submittal 003 Slurry Mix Design
 - o Approved by Navy on 02/27/20
- Submittal 004 Import Fill (Stanford Pile)
 - o Approved by Navy on 03/24/20
- Submittal 005 Drain Rock (Virgin Source Material Vulcan Pilarcitos Quarry in Half Moon Bay and Hanson Aggregates Sunol Quarry)
 - o Approved by Navy on 03/24/20
- Submittal 006 Rip Rap Armor Stone (Product data sheets/test reports)
 - o Approved by Navy 5/18/20
- Submittal 007 Slurry Wall Implementation Plan
 - o Approved by Navy 5/18/20
- Submittal 008 Filter Fabric Product Data
 - o Submitted to Navy on 6/01/20
 - Note that product data was also submitted for informational purposes for the Geogrid Reinforcement required for armored revetment at IR02 NW (the project specs for which *do not* require government approval)
- Submittal 009 Cone Penetrometer Testing (CPT) Investigation
 - o Navy comments received on 6/16/20

New Business

Status of Work

- Completed construction of working platform for slurry wall installation
- Imported clean fill
- Placed approved import fill at working platform
 - Conducted compaction testing of import fill at working platform
 - All tests results were within design specifications
- Setup Slurry Wall Equipment & Batch Plant
- ISO Pacific set-up S3 unit
- Conducted S3 Pre-Operational Testing Meeting with Navy/BCT
- UXO Construction Oversight

Project QC Meeting #011 Agenda (06/24/2020)

Parcel E Remedial Action – Phase 3 Hunters Point Naval Shipyard, San Francisco, CA Contract N62473-17-D-0006 CTO 4761

- Radiological controls and support
- Site maintenance ongoing (BMPs, fencing, etc.)
- Ongoing upwind and downwind continuous air monitoring, as well as work area real-time dust monitoring using personal data RAMs (pDRs)

Analytical Results

• No new analytical results received

Navy QA Oversight Update

- Biologists
- UXO
- RAD

Visitors

- Hamid Naimi Navy ROICC
- Jeff Griffin Navy ROICC
- Doug Delong Navy CSO
- Jamie DelPozzo BioMaAS
- Andrew Hawvichorst Smith-Emery
- Nina Bacey DTSC
- Tina Low Region 2 Water Board

Work to be accomplished the remainder of this week

- Complete setup of slurry wall equipment & batch plant
- Begin installation of slurry wall at IR02
- Rad Controls and support
- UXO support
- Daily air monitoring
- Site maintenance (BMPs, fencing, etc.)

Work to be accomplished in the next two weeks (See attached 2-week look ahead)

- Large Debris Radiological Characterization as needed
- Install Slurry Wall @ IR-02
- EOS-2; Excavate Shoreline Sediment/Soil/Debris
- Rad Controls and support
- UXO support
- Daily air monitoring
- Site maintenance (BMPs, fencing, etc.)

<u>Inspections</u>

Preparatory

• None

Initial

• None

Project QC Meeting #011 Agenda (06/24/2020)

Parcel E Remedial Action – Phase 3 Hunters Point Naval Shipyard, San Francisco, CA Contract N62473-17-D-0006 CTO 4761

Follow-up

- Dust Control and Air Monitoring
- Radiological Controls
- Topographical Survey
- Backfill and Compaction
- Install IR02-NW Working Platform, Slurry Wall
- UXO Construction Oversight
- Initial Radiological Survey
- Shoreline Excavation, Waste, Stockpile Activities
- Confirmation Sampling

Off-site Work or Materials Testing

• None

Additional Documentation Required

• None

QC, Production Issues

• None

Safety Issues

• All work was completed safely with no accidents or near misses reported.

<u>Items That May Require Revising Project Plans</u>

• None

Action Items

• None

Comments/Questions

Current Week and Two Week Look Ahead*

Parcel E Remedial Action – Phase 3 Hunters Point Naval Shipyard, San Francisco, CA Contract N62473-17-D-0006 CTO 4761

06/22/2020	06/23/2020	06/24/2020	06/25/2020	06/26/2020	06/27/2020	06/282020
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
 Set-up & Prep S3 for Pre-operational test Setup Slurry Wall Equipment & Batch Plant Rad Controls and support (all week) UXO support (all week) Air monitoring (all week) BMP Inspection/ site maintenance (Daily) Set-up & Prep S3 for POT 	S3 Pre-Operational Testing Meeting with Navy/BCT Setup Slurry Wall Equipment & Batch Plant	Weekly CQC Meeting Install Slurry Wall @ IR-02	Install Slurry Wall @ IR-02	Install Slurry Wall @ IR-02	No fieldwork	No fieldwork
06/29/2020	06/30/2020	07/01/2020	07/02/2020	07/03/2020	07/04/2020	07/05/2020
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
 Install Slurry Wall @ IR-02 Pre-characterization sampling (EOS-3) Rad Controls and support (all week) UXO support (all week) Air monitoring (all week) BMP Inspection/ site maintenance (Daily) 	Weekly CQC Meeting Install Slurry Wall @ IR-02 Large Debris Radiological Screening in EOS-1, EOS-2, & EOS-4	Large Debris Radiological Screening in EOS-1, EOS-2, & EOS-4 Install Slurry Wall @ IR-02	Large Debris Radiological Screening in EOS-1, EOS-2, & EOS-4 Install Slurry Wall @ IR-02	Independence Day observed, no fieldwork planned (subject to change)	No fieldwork	No fieldwork
07/06/2020	07/07/2020	07/08/2020	07/09/2020	07/10/2020	07/11/2020	07/12/2020
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Install Slurry Wall @ IR-02 Rad Controls and support (all week) UXO support (all week) Air monitoring (all week) BMP Inspection/ site maintenance (Daily)	Weekly CQC Meeting Install Slurry Wall @ IR-02	Large Debris Radiological Screening in EOS-1, EOS-2, & EOS-4 Install Slurry Wall @ IR-02 EOS-2 Excavate Shoreline Sediment/Soil/Debris	Large Debris Radiological Screening in EOS-1, EOS-2, & EOS-4 Install Slurry Wall @ IR-02 EOS-2 Excavate Shoreline Sediment/Soil/Debris	Large Debris Radiological Screening in EOS-1, EOS-2, & EOS-4 Install Slurry Wall Cap & Surface Completions EOS-2 Excavate Shoreline Sediment/Soil/Debris	No fieldwork	No fieldwork

^{*}Subject to change based on field conditions

Project QC Meeting #026 Agenda (06/24/2020)

Parcel E Remedial Action – Phase 1 Hunters Point Naval Shipyard, San Francisco, CA Contract N62473-12-D-2005 CTO 0024

Call-in number: (b) (4)

Start: 1100 End:

Safety Topic: Hearing protection

Old Business

Field Change Requests (FCR)

- 001: Existing SS/SD lines in RA excavations Navy Approved (05/01/20)
- 002: ISO-Pacific Soil Sorting System (S3) Proof of Concept Demonstration.
 - Approval was received by APTIM on 12/31.
- 003: Former SS/SD trenches in RA excavations In Navy review
- 004: Excavation Dewatering Navy approved 3/12
- 005: Addition of back-up laboratory (Enthalpy) to expedite TAT –Navy RPM approved 3/12/2020. SAP addendum (FCR) submitted 3/13/2020 to QAO. 4/17/20 canceled as Enthalpy lab closed (permanently out of business)
- 006: Impacts of the radiological rework areas on non-excavation, intrusive RA activities (i.e. well installation/decommissioning, GW injections, and soil gas surveys). APTIM prepared draft FCR; but on hold as need Navy to confirm extent of rework areas and potential limitations to planned Phase 1 RA work outside of IR-02 to identify impacts. on hold

Submittals

- Submittal 001 Import Fill (Stanford Pile)
 - Approved by Navy on 12/19/19; CDPH 01-08-2020
- Submittal 002 Drain Rock (Virgin Source Material Vulcan Pilarcitos Quarry in Half Moon Bay and Hanson Aggregates Sunol Quarry)
 - Approved by Navy on 02/27/2020

New Business

Status of Work

- Continued transferring soil to stockpiles and screening to 2-inch minus with PowerScreen
- Completed excavations EX02B122B, EX02B122A, EX02B122D, EX02B415, and EX02S320
 - Collected confirmation samples
 - Found 1 LLRO (Sound Powered Telephone Jack Box box) in 3rd lift of EX02B122A
- Started excavation EX02B122C
 - Found 3 LLRO's in 3rd lift
- Completed backfill and compaction testing of EX02B122B
 - o All tests results were within design specifications
- Completed removal of Former Firing Range Berm
- PRSO supported a site tour with representatives of DTSC and Region 2 Water Board.
- Imported clean fill and drain rock
- Completed set-up of ISO-Pacific S3
- Site maintenance (BMPs, fencing, etc.)
- Sanitized all equipment daily

Project QC Meeting #026 Agenda (06/24/2020)

Parcel E Remedial Action – Phase 1 Hunters Point Naval Shipyard, San Francisco, CA Contract N62473-12-D-2005 CTO 0024

• Conducted upwind and downwind continuous air monitoring as well as work area real-time dust monitoring using personal data RAMs (PDRs).

Analytical Results

• See attached, new results are highlighted

Navy QA Oversight Update

- Biologists
- UXO
- RAD

Visitors

- Hamid Naimi Navy ROICC
- Jeff Griffin Navy ROICC
- Doug Delong Navy CSO
- Jamie DelPozzo BioMaAS
- Andrew Hawvichorst Smith Emery
- Nina Bacey DTSC
- Tina Low Region 2 Water Board

Work to be accomplished the remainder of this week

- Complete excavation EX02B122C
- Start excavation EX02B288 and EX02B122
- Continue screening excavated soil to remove smaller debris
- Conduct pre-excavation characterization sampling in EOS-4
- Conduct post-excavation sampling
- S3 Proof-of-Concept Demonstration with RSY Pad Screening
- Waste stockpiling
- Receive import fill
- Air monitoring, site maintenance (BMPs, fencing, etc.)

Work to be accomplished in the next two weeks (See attached current plus 3-week look ahead)

- Continue excavations in EOS-01
- Conduct backfilling of excavations as appropriate
- Screen excavated soil to remove smaller debris
- Start S3 proof of concept with RSY pad screening
- Load, place and scan soil on RSY Pads
- Conduct upwind and downwind continuous air monitoring as well as work area real-time dust monitoring using personal data RAMs (PDRs).
- Site maintenance (BMPs, fencing, etc.)

Project QC Meeting #026 Agenda (06/24/2020)

Parcel E Remedial Action – Phase 1 Hunters Point Naval Shipyard, San Francisco, CA Contract N62473-12-D-2005 CTO 0024

<u>Inspections</u>

Preparatory

• None

Initial

• None

Follow-up

- Dust Control and Air Monitoring
- Radiological Controls
- UXO Construction Oversight
- Soil Excavations
- Backfill and Compaction

Off-site Work or Materials Testing

o None

Additional Documentation Required

o None

QC, Production Issues

o None

Safety Issues

o All work was completed safely with no accidents or near misses reported.

Items That May Require Revising Project Plans

o None

Action Items

Comments/Questions

Analytical Results Final Confirmation Soil Samples

Remedial Action at Parcel E - Phase 1 Hunters Point Naval Shipyard, San Francisco, California

Contract N62473-12-D-2005 CTO 0024

Excavation ID	Date Sampled	Meets Tier 2 Criteria	Chemicals of Concern	Comments
EX02B401	5/21/20- 6/01/20	N	Aroclor-1260	AR1260 (31,000 mg/kg) exceeds T2 (3.7mg/kg) in east sidewall
EX02GR179SW	06/04/20	N	Copper, Zinc	Copper (1,000mg/kg in floor, 6,000mg/kg in south sidewall) exceed, T2 criteria (620mg/kg) Zinc (1,500mg/kg in floor, 820 mg/kg in south sidewall) exceed, T2 criteria (790mg/kg)
EX02SS310	06/02/20	Y	Lead	Backfilled
EX02B412	05/24/20	N	Benzo(a)pyrene	B(a)P exceeds T2 criteria (1.7mg/kg) in west sidewall (1.8mg/kg) and east sidewall (1.9mg/kg)
EX02B398	05/20/20	Y	Lead	Ready for backfill
EX02B461	05/14/20	N	Benzo(a)pyrene Benzo(b)fluoranthene	B(a)P (2.4mg/kg) exceeds T2 (1.7mg/kg) in west sidewall
EX02B461- sidewall step- out	6/01/20	Y	Benzo(a)pyrene	Ready for backfill
EX02B100	5/14/20	N	Aroclor-1260	AR1260 (10mg/kg) exceeds T2 (3.7mg/kg) in sidewall SW-03
EX02B100- sidewall step- out	6/1/20	N	Aroclor-1260	AR1260 (9.3 mg/kg) exceeds T2 (3.7mg/kg) in east sidewall
EX02GR93SW (EOS-1)	5/14/20	N	Copper, Lead, TPH	Lead (1,300mg/kg, T2=1,300) TPH (11,903mg/kg, T2=3,500mg/kg) exceed T2 in sidewall SW-01-2.5
EX02GR93SW (EOS-1) – Sidewall step- out	6/1/2020	N	Lead, TPH	Lead (2,100mg/kg, T2=1,300) exceeds T2 criteria in north sidewall @ 2.5-feet
EX02MW149	5/14/20	N	Arsenic, Lead, Benzo(a)pyrene (BaP)	BaP (1.7mg/kg) exceeds T2 criteria (1.7mg/kg) in sidewall SW-02
EX02B149- sidewall step- out	06/01/20	Y	Benzo(a)pyrene	Ready for backfill
EX02B122E	5/13/20	N	Lead, Aroclor-1260, Dieldrin	Aroclor-1260 (12mg/kg) exceeded T2 criteria (3.7mg/kg) in floor sample
EX02B122E- floor step-out	5/27/20	Y	Aroclor-1260	Ready for backfill

Analytical Results Final Confirmation Soil Samples

Remedial Action at Parcel E - Phase 1 Hunters Point Naval Shipyard, San Francisco, California Contract N62473-12-D-2005 CTO 0024

EX02B403	5/13/20	Y	Manganese	Ready for backfill
EX02B405	5/6/20	Y	Zinc	Ready for backfill
				•
EX02B442	5/6/20	Y	Aroclor-1260	Ready for backfill
EX36B015	11/22/10	17	Copper, Mercury,	D 1611 14
	11/22/19	Y	ТРН	Backfill complete
EX36B033	11/22/10	3 7	Copper, Mercury,	D 1611
	11/22/19	Y	TPH	Backfill complete
EX36B163			1.1 DHC(+)	1 sidewall exceeded Tier 2 criteria for
	11/22/10	3.7	alpha-BHC (pest.),	Cu. Plan to conduct step-out
	11/22/19	N	copper, mercury	excavation. a
EX36B116	11/25/19	Y	SVOCs	Backfill complete
EASODITO				
	12/10/19	N		
EX04B030 -				3 sidewalls exceeded Tier 2 criteria.
Pre-				Plan to extend excavation on 3 sides
characterization				to 2 feet beyond pre-characterization
			PCBs, metals	locations.
EX13B007	12/10/19	N	PCBs	
				PCB above limit in 3 sidewalls
EX72SS23	12/10/19	Y	Zinc	Backfill complete
77701007				PCB above limit in all 4 sidewalls and
EX01SS350	12/10/19	N	PCBs	bottom
	-2.10.19		1 525	
EX56B021	12/30/19	Y	Mercury	Backfill complete
1/1/3010/21	12/30/17	1	ivicioui y	Dackini complete

Notes:

Table presents confirmation sample results unless otherwise noted.

Floor will be over-excavated 1-foot deeper and laterally (2.5-feet in each direction from the original confirmation sample location. A confirmation sample will collected at the same location as the original confirmation sample and analyzed for the constituent(s) that exceeded Tier 2 criteria in the original confirmation sample. Unless an additional step-down excavation extends the original planned excavation depth to below 5 feet, additional sidewall samples are not required and only a replacement bottom sample will be collected.

See Section 8.3.6 of RAWP and Section 17.1.2 of the SAP

^a Sidewall will be over-excavated 2-feet back from the original sidewall and laterally (10-feet maximum on each side of confirmation sample location). A confirmation sample will collected at the same depth as the original confirmation sample and analyzed for the constituent that exceeded Tier 2 criteria in the original confirmation sample.

Current Week and Two Week Look Ahead*

Parcel E Remedial Action – Phase 1 Hunters Point Naval Shipyard, San Francisco, CA Contract N62473-12-D-0005 CTO 0024

06/22/2020	06/23/2020	06/24/2020	06/25/2020	06/26/2020	06/27/2020	06/28/2020
• Pre-Excavation GWS • Continue excavations: EOS-1 (ESS/RAD) • EX02B122A • EX02B122C • EX02B122D • EOS-2 (RAD) • EX02B415 • Post excavation sampling • Waste stockpiling • Rad Controls and support (all week) • UXO support (all week) • Air monitoring (all week) • BMP Inspection/site maintenance (Daily)	Tuesday • Weekly CQC Meeting • Pre-Excavation GWS • Continue excavations: EOS-1 (ESS/RAD) • EX02B122D • EOS-2 (RAD) • EX02415 • Post excavation sampling • Waste stockpiling • PowerScreen Excavated Soil	O6/24/2020 Wednesday Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) EX02B288 EOS-2 (RAD) EX02S320 Post excavation sampling Waste stockpiling PowerScreen Excavated Soil	O6/25/2020 Thursday Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) EX02B288 Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads S3 Proof-of-Concept Demonstration with RSY Pad Screening	Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) EX02B288 Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads S3 Proof-of-Concept Demonstration with RSY Pad Screening	O6/27/2020 Saturday Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) EX02B122 Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads	No fieldwork
PowerScreen Excavated Soil 06/29/2020	06/30/2020	07/01/2020	07/02/2020	07/03/2020	07/04/2020	07/05/2020
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
 Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) Post excavation sampling Waste stockpiling Collect pre-excavation characterization samples Rad Controls and support (all week) UXO support (all week) Air monitoring (all week) BMP Inspection/site maintenance (Daily) Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads S3 Proof-of-Concept Demonstration with RSY Pad Screening 	Weekly CQC Meeting Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads S3 Proof-of-Concept Demonstration with RSY Pad Screening Conduct pre-characterization sampling (EOS-4)	Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads S3 Proof-of-Concept Demonstration with RSY Pad Screening	Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads S3 Proof-of-Concept Demonstration with RSY Pad Screening	Independence Day observed, no fieldwork is planned (Subject to change)	No fieldwork	No fieldwork
07/06/2020 Monday Pre-Excavation GWS Continue excavations: EOS-1 (ESS/RAD) Post excavation sampling Waste stockpiling Rad Controls and support (all week) UXO support (all week) Air monitoring (all week) BMP Inspection/site maintenance (Daily) Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads	07/07/2020 Tuesday • Weekly CQC Meeting • Pre-Excavation GWS (EOS-4) • Mobilize to EOS-4 • Screen Excavated Soil • Load, Place, & Scan Soil on RSY Pads	07/08/2020 Wednesday Pre-Excavation GWS Conduct excavations EOS-4 Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads	07/09/2020 Thursday Pre-Excavation GWS Conduct excavations EOS-4 Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads	07/10/2020 Friday Pre-Excavation GWS Conduct excavations EOS-4 Post excavation sampling Waste stockpiling Screen Excavated Soil Load, Place, & Scan Soil on RSY Pads	07/11/2020 Saturday No fieldwork	07/12/2020 Sunday No fieldwork

^{*}Subject to change based on field conditions